



# **STIC Search Report**

**EIC 1700**

901  
STIC Database Tracking Number: 144934

**TO: Anthony Green**  
**Location: REM 9C15**  
**Art Unit : 1755**  
**February 23, 2005**

**Case Serial Number: 10/721402**

**From: Usha Shrestha**  
**Location: EIC 1700**  
**REMSSEN 4B28**  
**Phone: 571/272-3519**  
**usha.shrestha@uspto.gov**

## **Search Notes**



# STIC Search Results Feedback Form

**EIC17000**

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader  
571/272-2505 REMSEN 4B28

## Voluntary Results Feedback Form

- I am an examiner in Workgroup:  Example: 1713  
➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to EIC1700 REMSEN 4B28

Mellerson, Kendra

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144934

**From:** Green, Anthony (AU1755)  
**Sent:** Thursday, February 10, 2005 6:41 PM  
**To:** STIC-EIC1700  
**Subject:** Structure search 10/721,402

Please do a structure search for claim 1 of this application. Thanks

Anthony Green  
Primary Patent Examiner  
AU 1755  
REMSSEN 9C-15  
571-272-1367

=> fil reg

FILE 'REGISTRY' ENTERED AT 12:37:56 ON 23 FEB 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 American Chemical Society (ACS)

=> d his

FILE 'LREGISTRY' ENTERED AT 09:37:41 ON 23 FEB 2005  
L1 STR

FILE 'REGISTRY' ENTERED AT 09:43:22 ON 23 FEB 2005  
L2 50 S L1  
L3 STR L1  
L4 50 S L3  
L5 4396 S L4 FUL

FILE 'LREGISTRY' ENTERED AT 10:01:10 ON 23 FEB 2005  
L6 STR L3  
L7 STR L3  
L8 STR L6  
L9 STR L7

FILE 'REGISTRY' ENTERED AT 11:16:16 ON 23 FEB 2005  
L10 0 S L8 SAM SUB=L5  
L11 0 S L9 SAM SUB=L5  
L12 16 S (L8 OR L9) FUL SUB=L5

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L13 STR L3

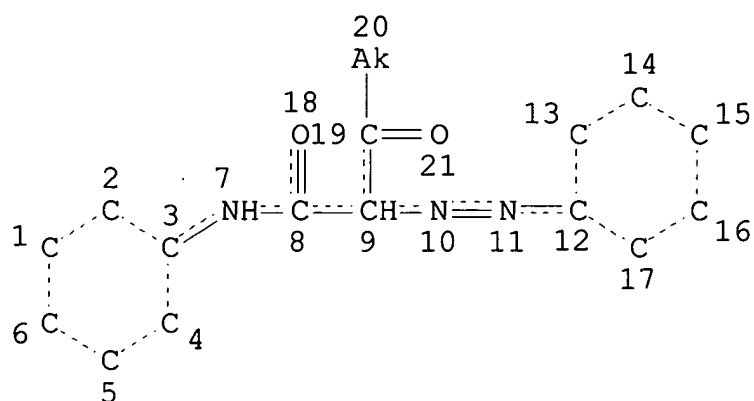
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L15 1548 S L13 FUL SUB=L5  
SAV L14 GRE721/A  
SAV L15 GRE721A/A  
SAV TEMP L5 GRE721B/A

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L16 5 S L12  
L17 3618 S L15  
L18 4 S L16 AND L17

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=> d que l18

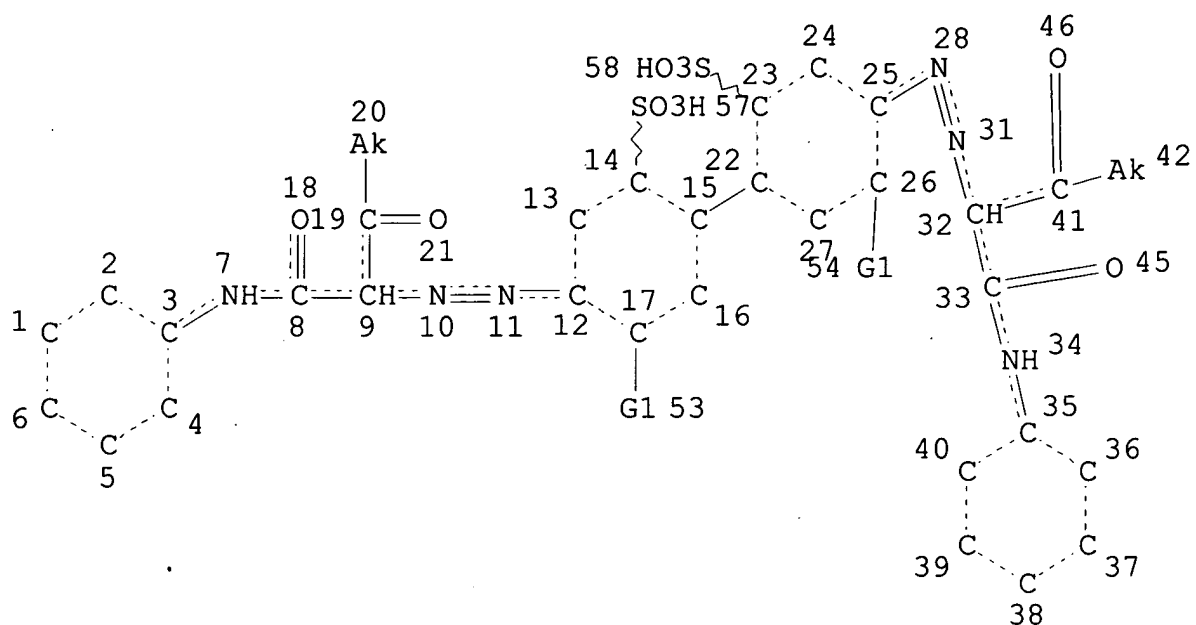
L3 STR



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CONNECT IS E2 RC AT 10
CONNECT IS E2 RC AT 11
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 21

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L5      4396 SEA FILE=REGISTRY SSS FUL L3
L8      STR
```



Ak~O  
@55 56

VAR G1=AK/55

NODE ATTRIBUTES:

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CONNECT IS E2 RC AT 11

CONNECT IS E2 RC AT 28

CONNECT IS E2 RC AT 31

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

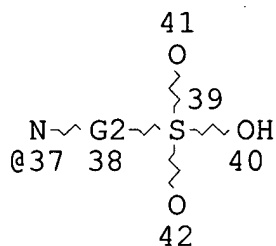
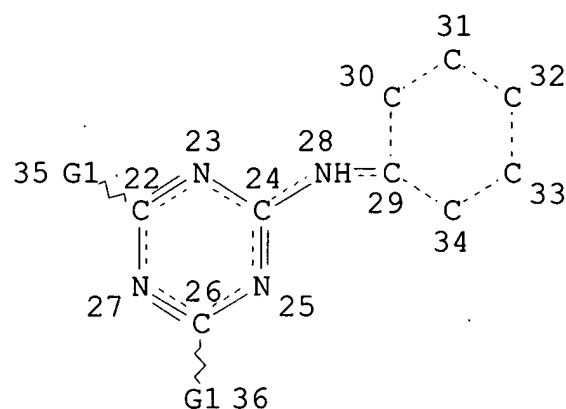
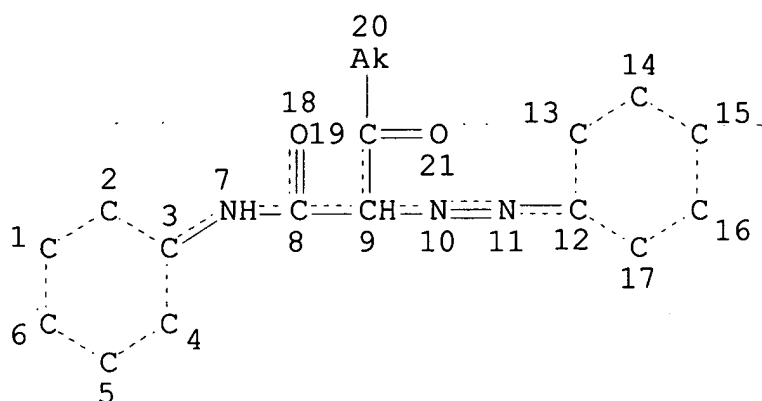
GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 48

STEREO ATTRIBUTES: NONE

L9 STR



VAR G1=OH/37

VAR G2=AK/CB

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CONNECT IS E2 RC AT 11

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

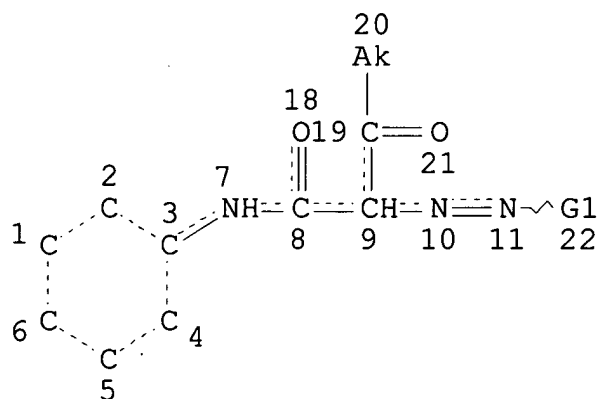
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STEREO ATTRIBUTES: NONE

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L13 STR



G2 $\wedge$ Cb  
23 @24

VAR G1=PH/24  
VAR G2=CL/NO2/ME/MEO  
NODE ATTRIBUTES:  
CONNECT IS E2 RC AT 10  
CONNECT IS E2 RC AT 11  
CONNECT IS X3 RC AT 24  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 18

STEREO ATTRIBUTES: NONE  
L15 1548 SEA FILE=REGISTRY SUB=L5 SSS FUL L13  
L16 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L12  
L17 3618 SEA FILE=HCAPLUS ABB=ON PLU=ON L15  
L18 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L16 AND L17

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 12:38:23 ON 23 FEB 2005  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l18 1-4 ibib abs hitstr hitind

L18 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN  
ACCESSION NUMBER: 2004:446936 HCAPLUS  
DOCUMENT NUMBER: 141:8600  
TITLE: Yellow pigment composition for image recording



INVENTOR(S): and process for producing the same  
 Takahara, Koichi; Sato, Junichiro; Misono,  
 Kensuke; Kitamura, Kunji; Tamatome, Hidehiro  
 PATENT ASSIGNEE(S): Sanyo Color Works, Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 22 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1424370	A1	20040602	EP 2003-257476	2003 1127
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2003253188	A2	20030910	JP 2002-362517	2002 1213
JP 2004204221	A2	20040722	JP 2003-366182	2003 1027
PRIORITY APPLN. INFO.:			JP 2002-344030	A 2002 1127
			JP 2002-362517	A 2002 1213
			JP 2003-366182	A 2003 1027

OTHER SOURCE(S): MARPAT 141:8600

AB Monoazo based yellow pigment compns. for image recording that are suitable as a well-balanced yellow coloring agent for image recording with favorable reproducibility of images and image retaining capacity, which is inexpensive and excellent in safety are provided. The composition includes a monoazo yellow base pigment represented by R1N:NC(COMe)HCONHR2 [R1 =(optionally 2,4-di-substituted) Ph group; R2 = (optionally tri-substituted) Ph group], and a particular disazo yellow pigment having a sulfonic acid group and/or a particular monoazo yellow pigment.

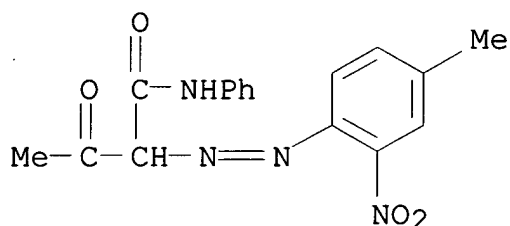
IT 2512-29-0P 6358-31-2P 596806-21-2P

(coupling reaction in manufacture of yellow pigment composition  
for image

recording)

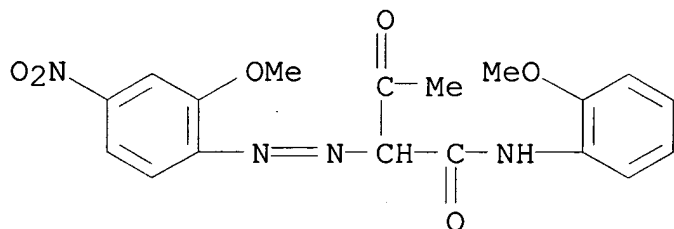
RN 2512-29-0 HCAPLUS

CN Butanamide, 2-[(4-methyl-2-nitrophenyl)azo]-3-oxo-N-phenyl- (9CI)  
(CA INDEX NAME)



RN 6358-31-2 HCAPLUS

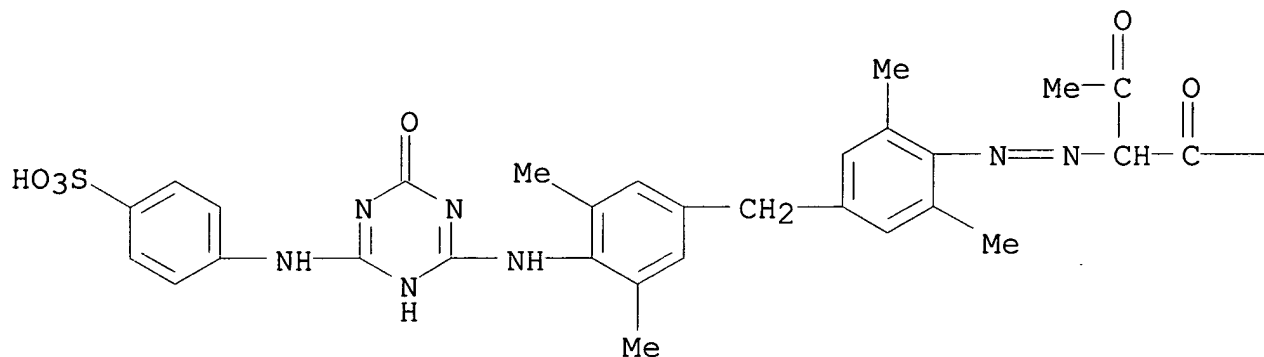
CN Butanamide, 2-[(2-methoxy-4-nitrophenyl)azo]-N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



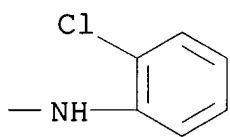
RN 596806-21-2 HCAPLUS

CN Benzenesulfonic acid, 4-[[[6-[[4-[[4-[[1-[[[(2-chlorophenyl)amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

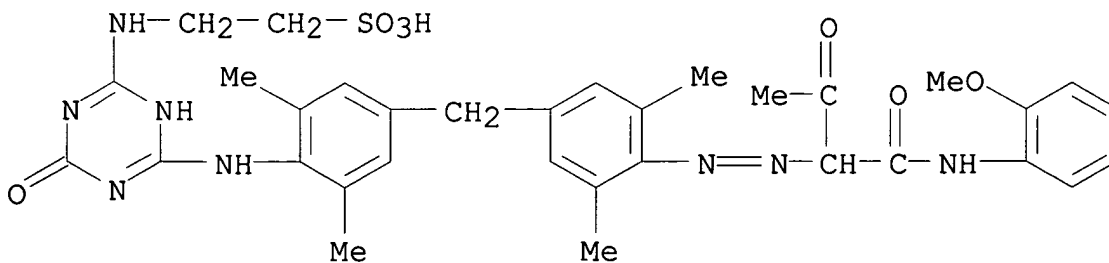


IT 596806-19-8P 596806-20-1P

(manufacture of yellow pigment composition for color image recording)

RN 596806-19-8 HCAPLUS

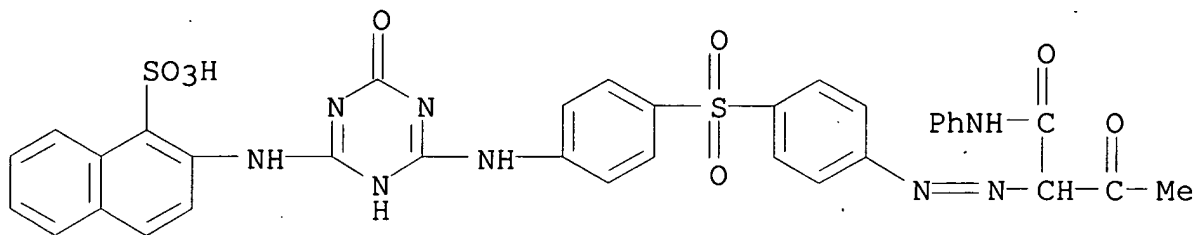
CN Ethanesulfonic acid, 2-[[[1,4-dihydro-6-[[4-[[4-[[1-[[[2-methoxyphenyl]amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 596806-20-1 HCAPLUS

CN 1-Naphthalenesulfonic acid, 2-[[[1,4-dihydro-4-oxo-6-[[4-[[4-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]phenyl]sulfonyl]phenyl]ami

no]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



IC ICM C09B067-00

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 42, 74

IT **2512-29-0P 6358-31-2P 596806-21-2P**

697148-75-7P 697148-81-5P 697148-90-6P

(coupling reaction in manufacture of yellow pigment composition for image recording)

IT **596806-19-8P 596806-20-1P**

(manufacture of yellow pigment composition for color image recording)

L18 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:710928 HCAPLUS

DOCUMENT NUMBER: 139:246912

TITLE: Yellow pigment compositions for image recording and preparation method thereof

INVENTOR(S): Takahara, Koichi; Misono, Kensuke; Tamatome, Hidehiro; Sato, Junichiro; Kitamura, Kunji

PATENT ASSIGNEE(S): Sanyo Color Works, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2003253188	A2	20030910	JP 2002-362517	2002 1213
JP 2004204221	A2	20040722	JP 2003-366182	2003

US 2004138434	A1	20040715	US 2003-721402	1027
				2003
				1125
EP 1424370	A1	20040602	EP 2003-257476	2003
				1127
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
PRIORITY APPLN. INFO.:			JP 2002-344030	A
				2002
				1127
			JP 2002-362517	A
				2002
				1213
			JP 2003-366182	A
				2003
				1027

OTHER SOURCE(S): MARPAT 139:246912  
GI

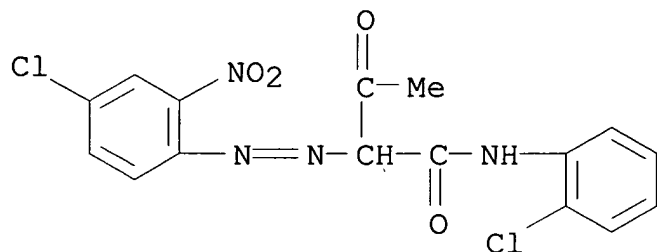
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT  
\*

AB The pigment compns. for use in ink-jet printing, electrostatic printing, and electrophotog. image recording contain yellow pigments I, II, and III (R1, R2 = H, Cl, NO2, Me, OMe; R3-R5 = H, Cl, NO2, Me, OMe, OEt; R6, R7 = Me, OMe; Q1-Q4 = H, Cl-2 lower alkyl, lower alkoxy, OH; Q1-Q4 = H, lower alkyl, alkoxy, OH; W = CH2, O, S, SO2, O-p-C6H4O, CONH, O-m-C6H4O, O-p-C6H4C6H4-p-O, O-p-C6H4SO2C6H4-p-O; A, B = NHYSO3H, OH; Y = ethylene, phenylene, naphthylene; m = 0, 1). Thus, coupling of m-nitro-o-anisidine and IV with acetoacetyl o-anisidide gave a pigment composition having an average pigment diameter of 0.08  $\mu$ m.

IT **6486-23-3P 150206-17-0P 596806-19-8P**  
**596806-20-1P 596806-21-2P**  
(preparation of yellow azo pigment compns. for image recording applications)

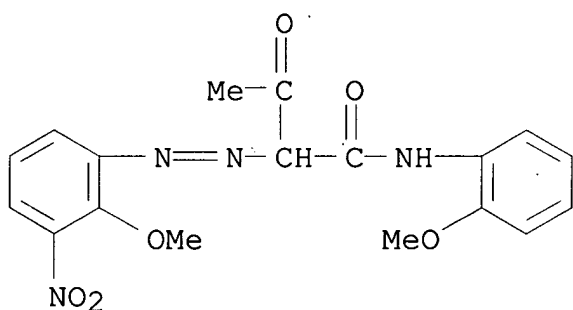
RN 6486-23-3 HCAPLUS

CN Butanamide, 2-[(4-chloro-2-nitrophenyl)azo]-N-(2-chlorophenyl)-3-oxo- (9CI) (CA INDEX NAME)



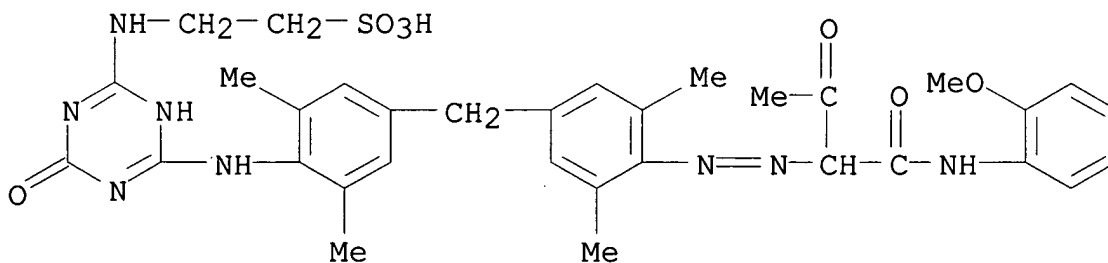
RN 150206-17-0 HCAPLUS

CN Butanamide, 2-[(2-methoxy-3-nitrophenyl)azo]-N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



RN 596806-19-8 HCAPLUS

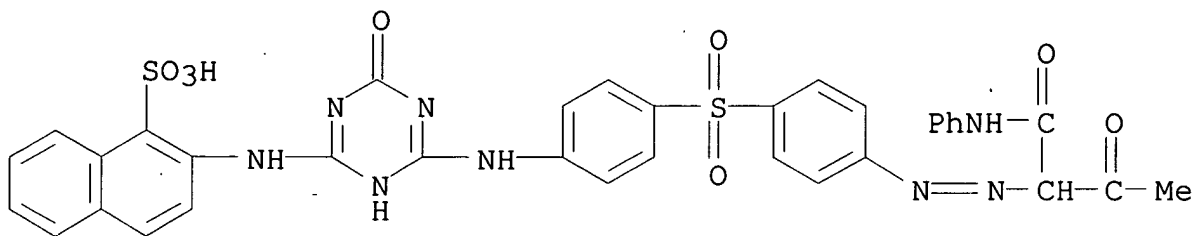
CN Ethanesulfonic acid, 2-[[[1,4-dihydro-6-[[4-[[4-[[1-[[[2-methoxyphenyl]amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 596806-20-1 HCAPLUS

CN 1-Naphthalenesulfonic acid, 2-[[[1,4-dihydro-4-oxo-6-[[4-[[4-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo]phenyl]sulfonyl]phenyl]ami

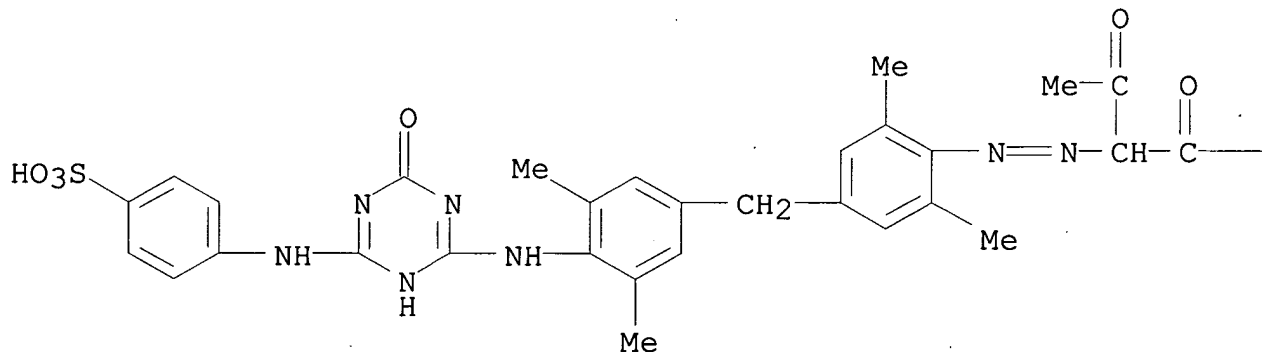
no]-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



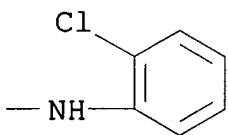
RN 596806-21-2 HCAPLUS

CN Benzenesulfonic acid, 4-[[[6-[[[4-[[[4-[[[1-[[[(2-chlorophenyl)amino]carbonyl]-2-oxopropyl]azo]-3,5-dimethylphenyl]methyl]-2,6-dimethylphenyl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C09D017-00

ICS B41M005-00; C09B029-33; C09B035-035; C09B067-22; C09D011-00;  
G03G009-09

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and  
Photographic Sensitizers)

Section cross-reference(s): 42, 74

IT **6486-23-3P 150206-17-0P 596806-19-8P**

**596806-20-1P 596806-21-2P**

(preparation of yellow azo pigment compns. for image recording applications)

L18 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:729868 HCAPLUS

DOCUMENT NUMBER: 123:259916

TITLE: Pigment dispersants

INVENTOR(S): Kitamura, Kunji; Miki, Toshuki; Saiki, Shunjiro; Saiki, Mutsuhiko

PATENT ASSIGNEE(S): Sanyo Color Works, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
JP 07126546	A2	19950516	JP 1993-310987	1993 1106
JP 3561846	B2	20040902	JP 1993-310987	1993 1106

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 123:259916  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT  
\*

AB Title dispersants, useful for pigments in coatings and inks, comprise I [R = residue of azo coupler; R1, R2 = OH, NHYSO3H; Y = ethylene, (un)substituted phenylene, naphthylene;  $\geq 1$  of R1 and R2 being NHYSO3H; Q = H, halo, lower alkyl, lower alkoxy, OH; Z = CH2, O, S, SO2, CONH, O-p-C6H4-p-C6H4O, O-p-C6H4-SO2-p-C6H4, O-p-C6H4-C(CF3)2-p-C6H4O, O-p-C6H4O, O-m-C6H4O, CH:CH; m  $\geq 0$ ] and their metal salts, ammonium salts, and amine salts.  
A mixture of C.I. Pigment Yellow 83 9.0, II 1.0, urethane varnish

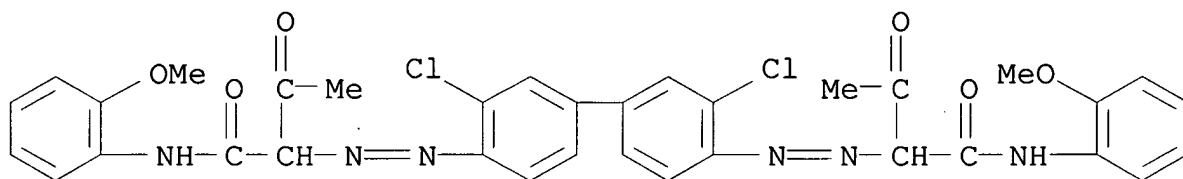


45.0, and thinner (toluene/iPrOH/MEK) 45.0 parts showed viscosity 113 cP at 60 rpm and gloss 87.2%.

IT **4531-49-1**, C.I. Pigment Yellow 17 **5468-75-7**,  
C.I. Pigment Yellow 14 **5567-15-7**, C.I. Pigment Yellow 83  
**6358-31-2**, C.I. Pigment Yellow 74 **6358-85-6**,  
C.I. Pigment Yellow 12 **6505-28-8**, C.I. Pigment Orange 16  
(pigment dispersants for coatings and inks)

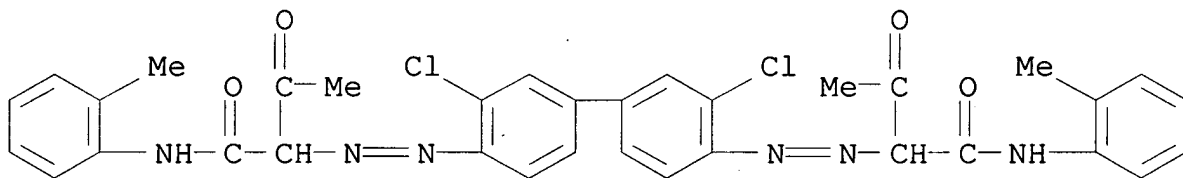
RN 4531-49-1 HCAPLUS

CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



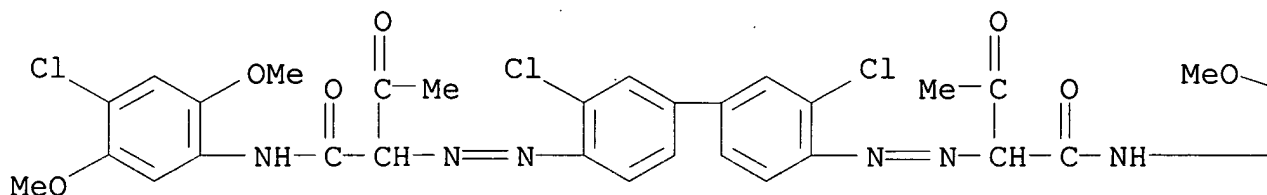
RN 5468-75-7 HCAPLUS

CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(2-methylphenyl)-3-oxo- (9CI) (CA INDEX NAME)



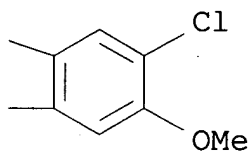
RN 5567-15-7 HCAPLUS

CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[N-(4-chloro-2,5-dimethoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



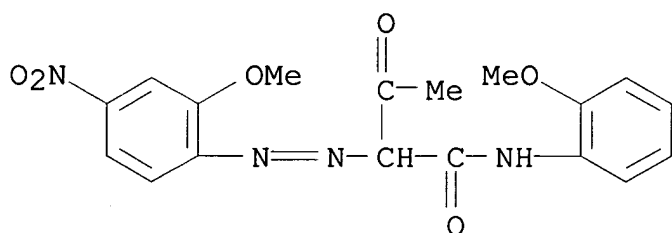
PAGE 1-A

PAGE 1-B



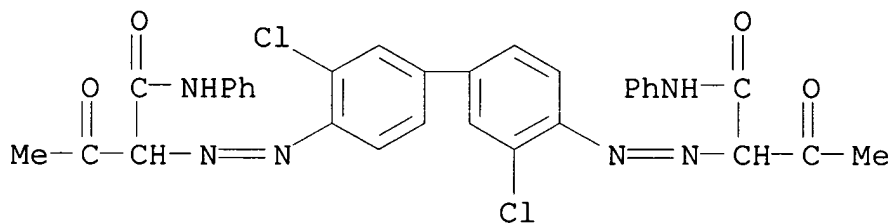
RN 6358-31-2 HCAPLUS

CN Butanamide, 2-[(2-methoxy-4-nitrophenyl)azo]-N-(2-methoxyphenyl)-3-oxo- (9CI) (CA INDEX NAME)



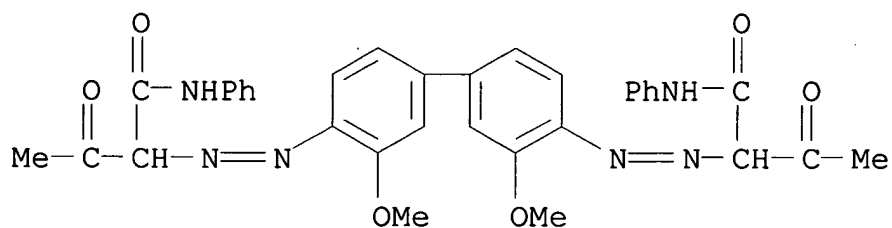
RN 6358-85-6 HCAPLUS

CN Butanamide, 2,2'-[(3,3'-dichloro[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



RN 6505-28-8 HCAPLUS

CN Butanamide, 2,2'-[(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[3-oxo-N-phenyl- (9CI) (CA INDEX NAME)



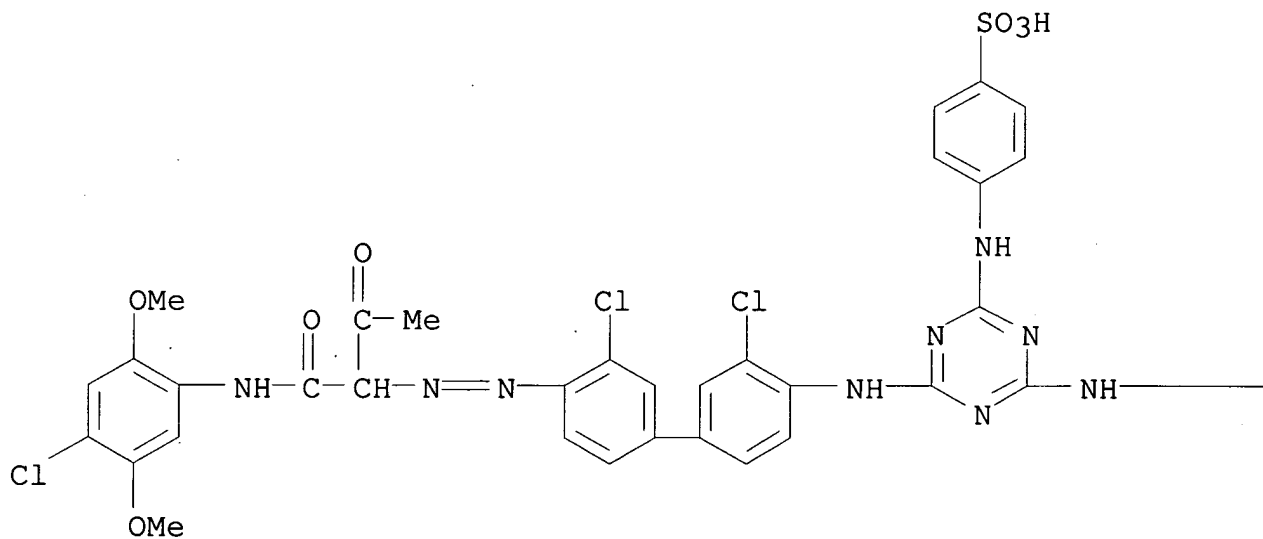
IT **169379-44-6P 169379-45-7P 169379-46-8P**  
**169379-47-9P 169379-48-0P 169379-49-1P**  
**169379-50-4P 169379-51-5P 169379-54-8P**

(pigment dispersants for coatings and inks)

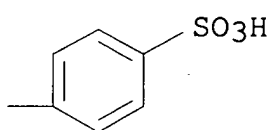
RN 169379-44-6 HCAPLUS

CN Benzenesulfonic acid, 4,4'-[[6-[[[3,3'-dichloro-4'-[[1-[[[4-chloro-2,5-dimethoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis- (9CI)  
 (CA INDEX NAME)

PAGE 1-A

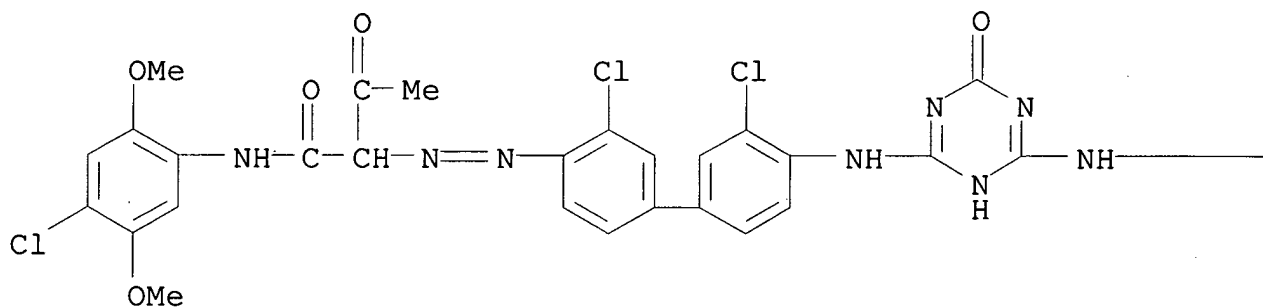


PAGE 1-B

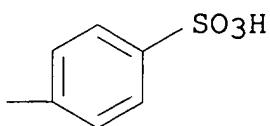


RN 169379-45-7 HCAPLUS  
 CN Benzenesulfonic acid, 4-[[[6-[[[3,3'-dichloro-4'-[[[1-[[[4-chloro-2,5-dimethoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

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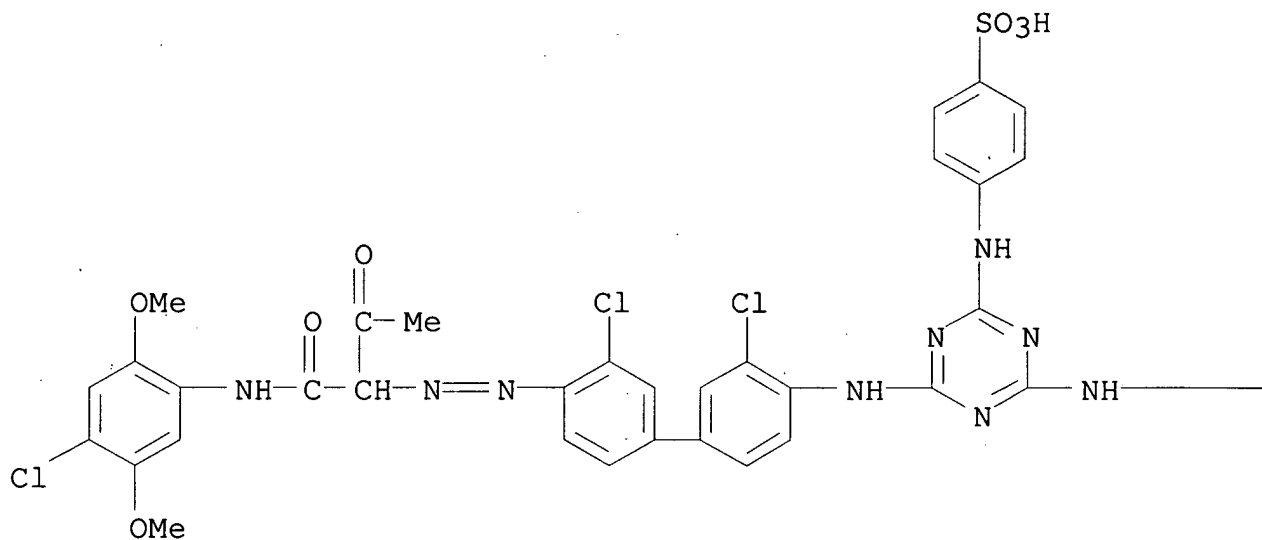
PAGE 1-B



RN 169379-46-8 HCAPLUS

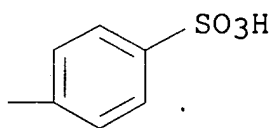
CN Benzenesulfonic acid, 4,4'-[[6-[[3,3'-dichloro-4'-[[1-[[4-chloro-2,5-dimethoxyphenyl]amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,3,5-triazine-2,4-diyl]diimino]bis-, barium salt (1:1) (9CI) (CA INDEX NAME)

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● Ba

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RN 169379-47-9 HCAPLUS

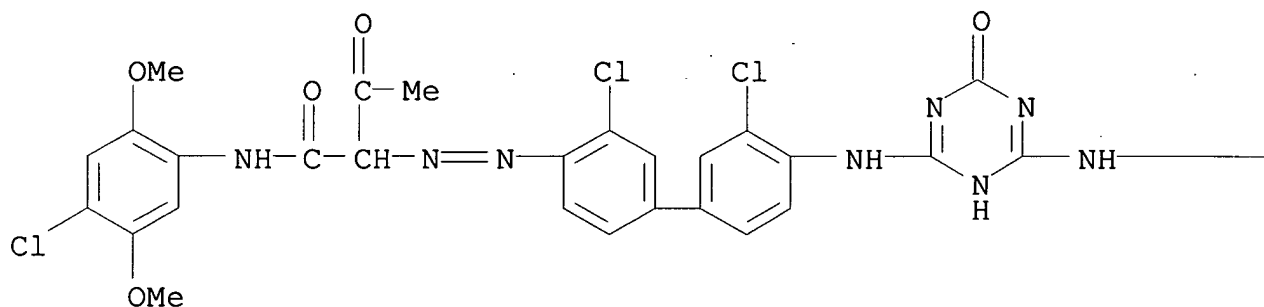
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[1-[[4-chloro-2,5-dimethoxyphenyl]amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]-, compd. with 1-octadecanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

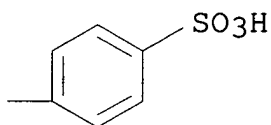
CRN 169379-45-7

CMF C33 H27 Cl3 N8 O8 S

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CM 2

CRN 124-30-1

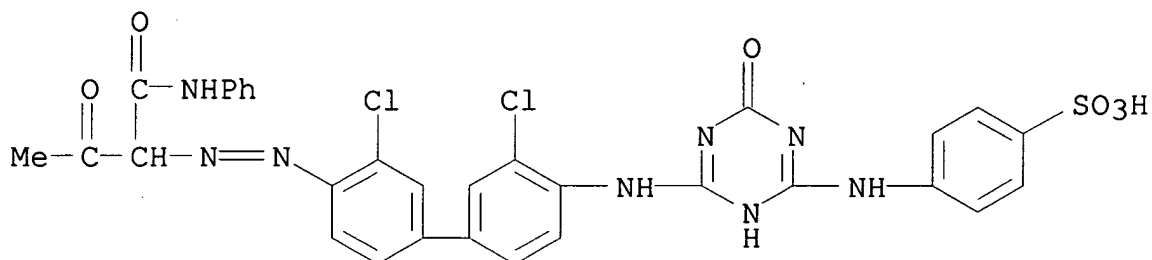
CMF C18 H39 N

H<sub>2</sub>N-(CH<sub>2</sub>)<sub>17</sub>-Me

RN 169379-48-0 HCAPLUS

CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[2-oxo-1-(phenylamino)carbonyl]propyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-

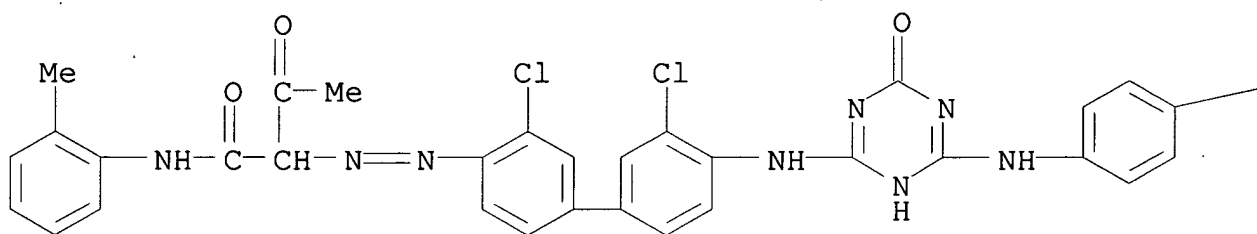
dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 169379-49-1 HCAPLUS

CN Benzenesulfonic acid, 4-[[[6-[[[3,3'-dichloro-4'-[[1-[[[2-methylphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

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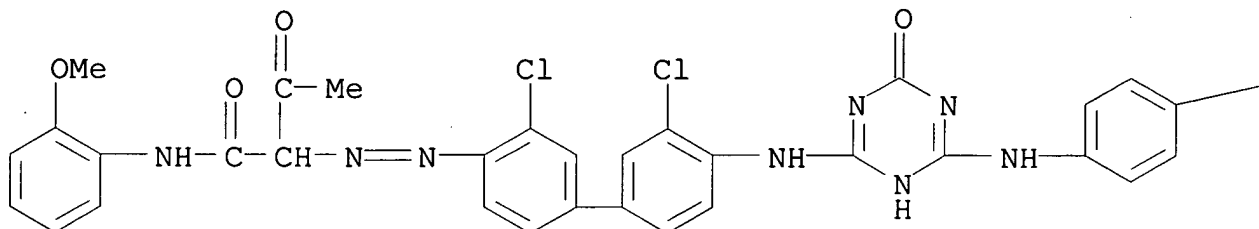
PAGE 1-B

— SO<sub>3</sub>H

RN 169379-50-4 HCAPLUS

CN Benzenesulfonic acid, 4-[[[6-[[[3,3'-dichloro-4'-[[1-[[[2-methoxyphenyl)amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)

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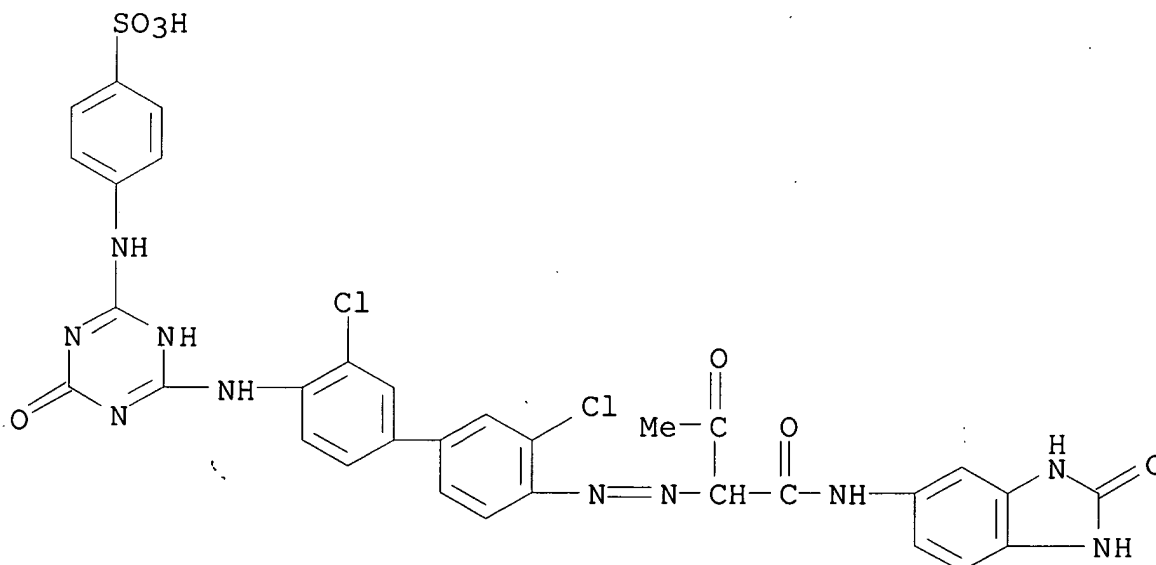


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—SO<sub>3</sub>H

RN 169379-51-5 HCAPLUS

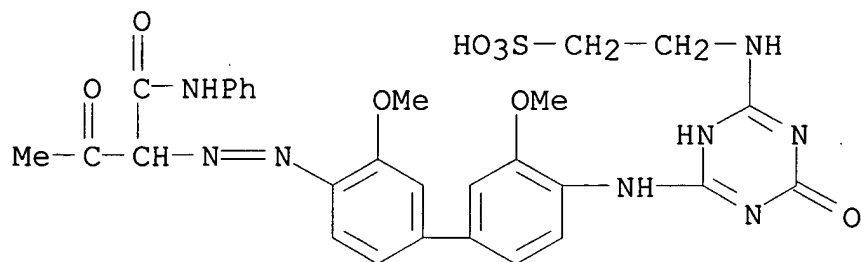
CN Benzenesulfonic acid, 4-[[6-[[3,3'-dichloro-4'-[[1-[[2,3-dihydro-2-oxo-1H-benzimidazol-5-yl]amino]carbonyl]-2-oxopropyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)



RN 169379-54-8 HCAPLUS

CN Ethanesulfonic acid, 2-[[6-[[3,3'-dimethoxy-4'-[[2-oxo-1-[(phenylamino)carbonyl]propyl]azo][1,1'-biphenyl]-4-yl]amino]-1,4-dihydro-4-oxo-1,3,5-triazin-2-yl]amino]- (9CI) (CA INDEX NAME)





IC ICM C09B067-20  
 CC 42-6 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 25, 41  
 IT 2425-85-6, C.I. Pigment Red 3 3520-72-7, C.I. Pigment Orange 13  
**4531-49-1**, C.I. Pigment Yellow 17 5280-68-2, C.I.  
 Pigment Red 146 **5468-75-7**, C.I. Pigment Yellow 14  
**5567-15-7**, C.I. Pigment Yellow 83 **6358-31-2**,  
 C.I. Pigment Yellow 74 **6358-85-6**, C.I. Pigment Yellow 12  
 6358-87-8, C.I. Pigment Red 38 6410-41-9, C.I. Pigment Red 5  
**6505-28-8**, C.I. Pigment Orange 16 6883-91-6, C.I.  
 Pigment Red 37 12225-18-2, C.I. Pigment Yellow 97 15793-73-4,  
 C.I. Pigment Orange 34 31778-10-6, C.I. Pigment Red 208  
 31837-42-0, C.I. Pigment Yellow 151 36888-99-0, C.I. Pigment  
 Yellow 139

(pigment dispersants for coatings and inks)

IT **169379-44-6P 169379-45-7P 169379-46-8P**  
**169379-47-9P 169379-48-0P 169379-49-1P**  
**169379-50-4P 169379-51-5P** 169379-52-6P  
 169379-53-7P **169379-54-8P** 169379-56-0P 169379-58-2P  
 169379-59-3P 169379-60-6P 169379-61-7P 169379-62-8P  
 169379-63-9P 169379-64-0P 169379-65-1P 169379-66-2P  
 169379-67-3P

(pigment dispersants for coatings and inks)

L18 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1969:440227 HCAPLUS

DOCUMENT NUMBER: 71:40227

TITLE: Direct phthalocyanine green dyes

INVENTOR(S): Chmatal, Vladimir; Allan, Zdenek J.; Horyna,  
 Jaroslav; Panchartek, Josef; Virag, Oldrich

SOURCE: Czech., 3 pp.  
 CODEN: CZXXA9

DOCUMENT TYPE: Patent

LANGUAGE: Czech

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CS 121263		19661215	CS	1964 0505

GI For diagram(s), see printed CA Issue.

AB Brilliant green dyes of the general formula I (Pc is a Cu phthalocyanine residue) were prepared and have a good light and wash fastness on cellulose. Thus, 32.2 parts of the equimol. condensate from 2,4-(H<sub>2</sub>N)2C<sub>6</sub>H<sub>3</sub>SO<sub>3</sub>H and cyanuric chloride was heated to 40° with 50.6 parts 3,1,5-H<sub>2</sub>NC<sub>10</sub>H<sub>5</sub>-(SO<sub>3</sub>H)<sub>2</sub> → 4-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>NHCOCH<sub>2</sub> COMe, cooled to 20°, treated with aqueous suspension of 94.9 parts Cu sulfophthalocyaninetris-(sulfonyl chloride), condensed with 9.2 parts benzidine, and heated for 1 hr. to 90-100° to give I [R = H, X = direct bond, Y = 1,5,3-(HO<sub>3</sub>S)2C<sub>10</sub>H<sub>5</sub>(Q)], a dark green powder soluble in H<sub>2</sub>O and concentrated

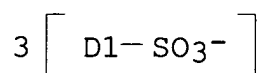
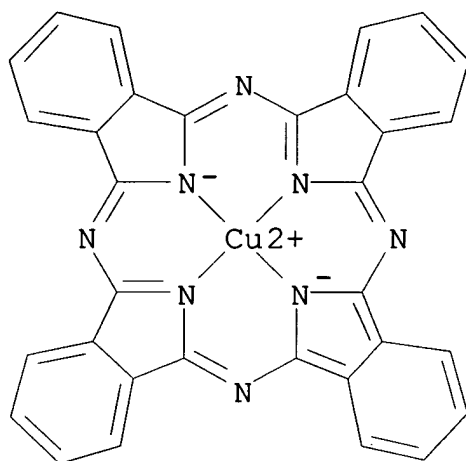
H<sub>2</sub>SO<sub>4</sub>. Similarly were prepared green I (R, X, and Y given): H, NHCO, Q; SO<sub>3</sub>H, CH:CH, Q. Similarly prepared were the yellowish green I (R = H, X = direct bond) with Y being 4,3-MeO(HO<sub>3</sub>S)C<sub>6</sub>H<sub>3</sub> or 4,3-Me(HO<sub>3</sub>S)C<sub>6</sub>H<sub>3</sub>.

IT **26427-99-6P 26428-01-3P 26777-95-7P**  
(preparation of)

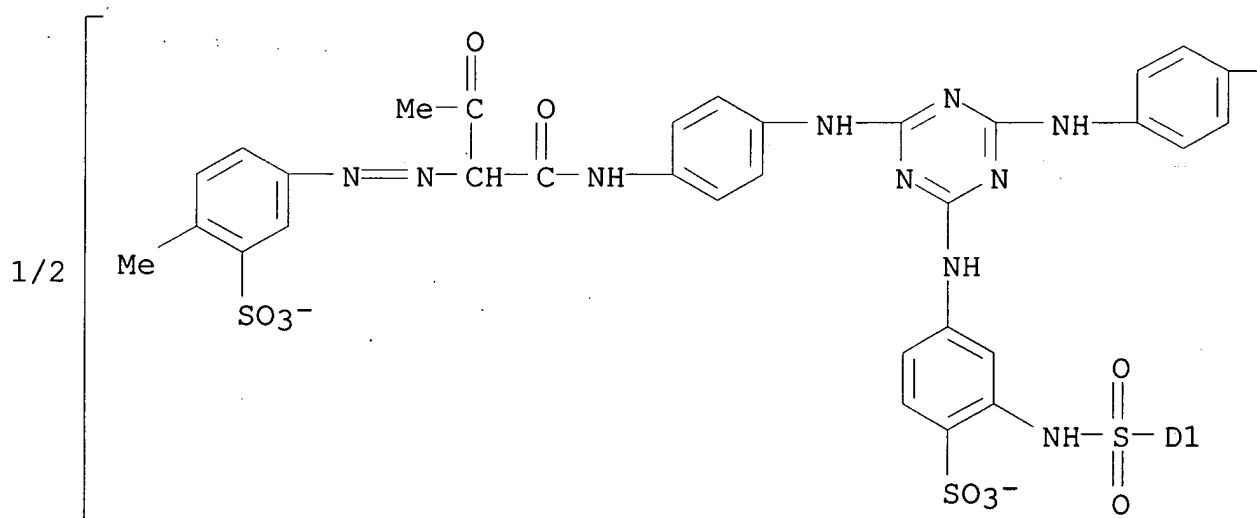
RN 26427-99-6 HCAPLUS

CN Copper, [μ-[[decahydrogen [4,4'-biphenylylenebis[imino[6-[p-[2-[(3-sulfo-p-tolyl)azo]acetoacetamido]anilino]-s-triazine-4,2-diyl]imino(6-sulfo-m-phenylene)iminosulfonyl]]diphthalocyaninetrisulfonato](4-)]di- (8CI) (CA INDEX NAME)

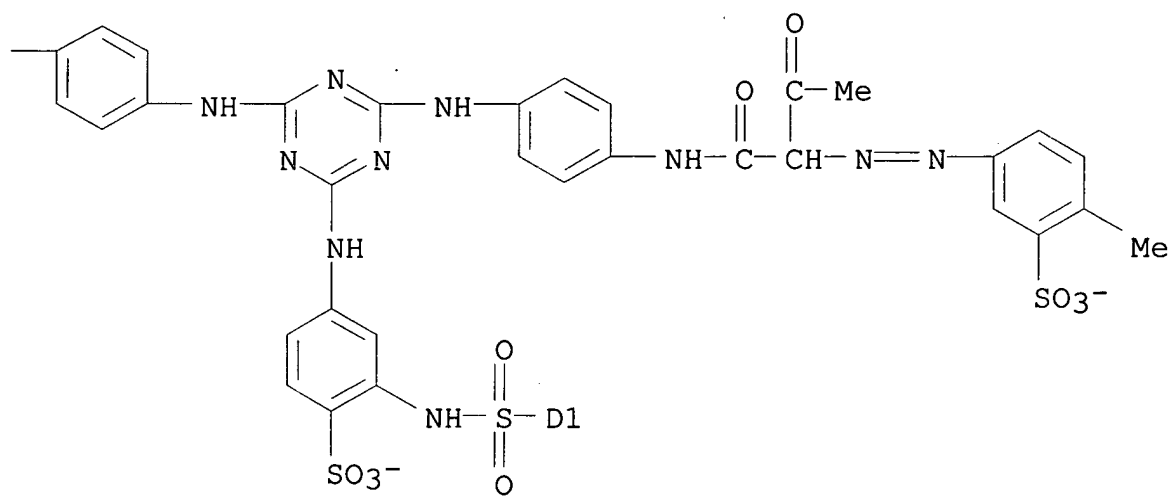
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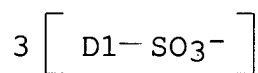
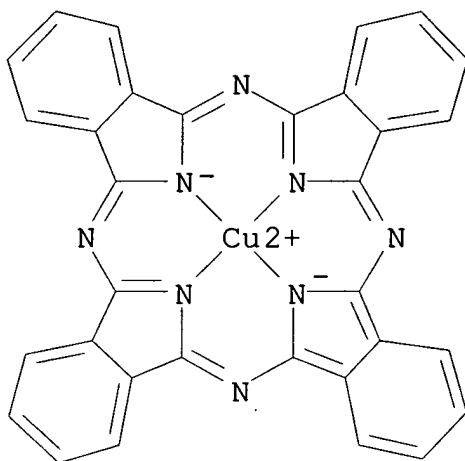
PAGE 2-B



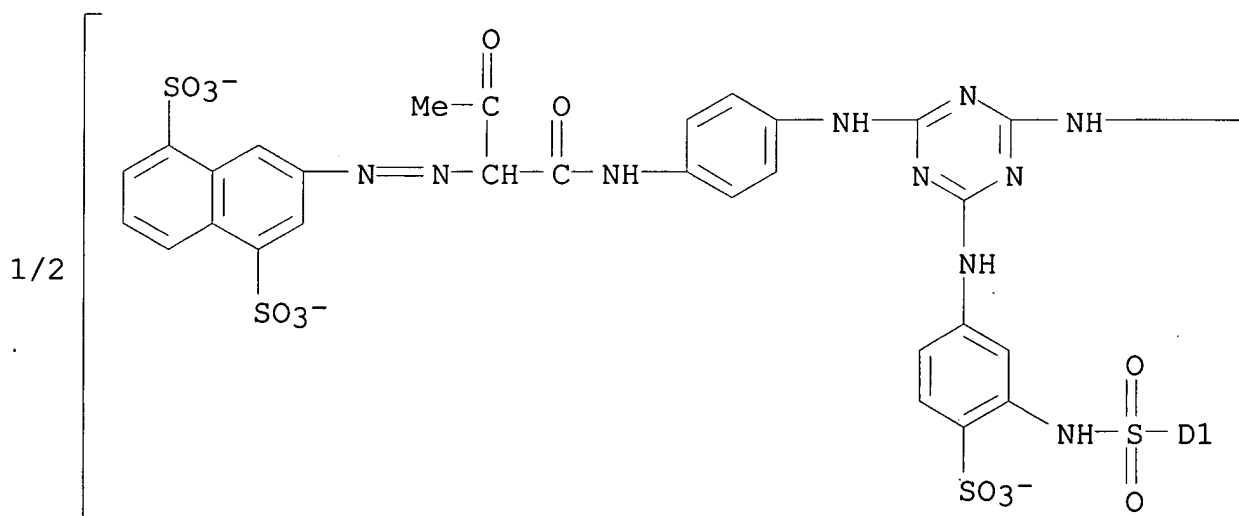
RN 26428-01-3 HCAPLUS

CN Copper, [ $\mu$ -[[tetradecahydrogen [vinylenebis[(3-sulfo-p-phenylene)imino[6-[p-[2-[(4,8-disulfo-2-naphthyl)azo]acetoacetamido]anilino]-s-triazine-4,2-diyl]imino(6-sulfo-m-phenylene)iminosulfonyl]]diphthalocyaninetrisulfonato](4-)]di- (8CI) (CA INDEX NAME)

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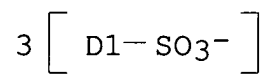
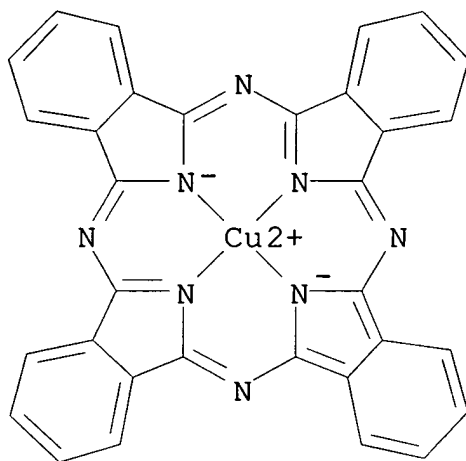
PAGE 2-A



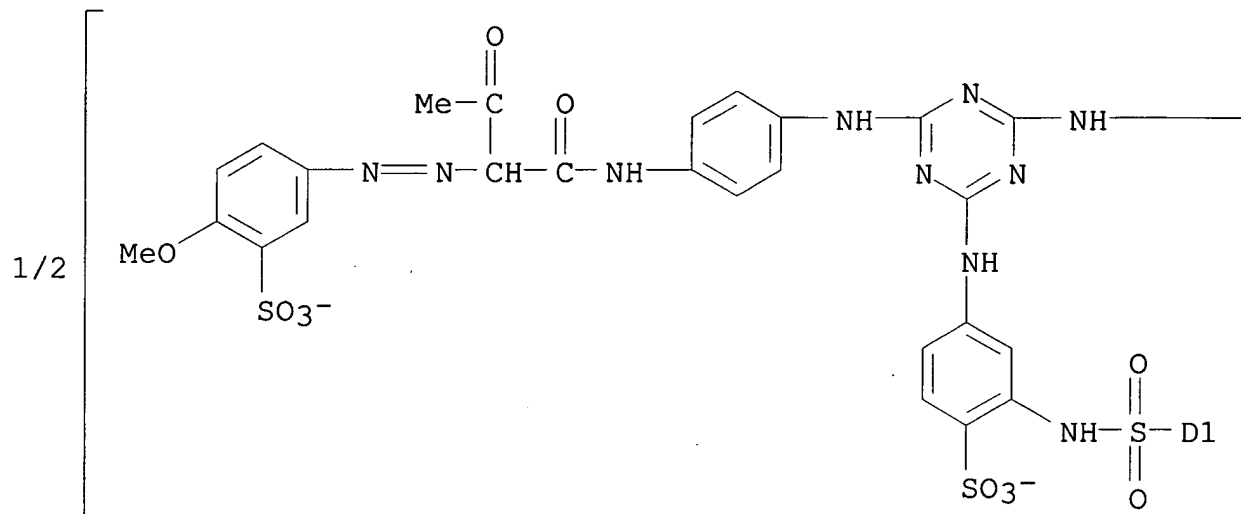
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RN	26777-95-7	HCAPLUS
CN	Copper, [ $\mu$ -[[decahydrogen [4,4'-biphenylylenebis[imino[6-[p-[2- [(4-methoxy-3-sulphophenyl)azo]acetoacetamido]anilino]-s-triazine- 4,2-diyl]imino(6-sulfo-m-phenylene)iminosulfonyl]]diphthalocyanine trisulfonato](4-)]di- (8CI) (CA INDEX NAME)	

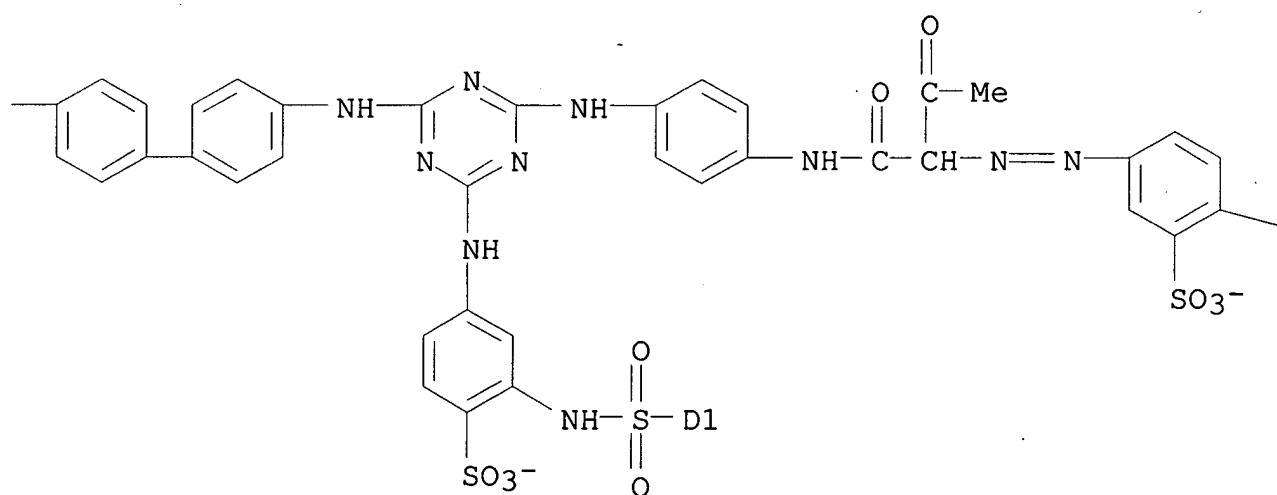
PAGE 1-A



PAGE 2-A

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PAGE 2-B





PAGE 2-C

— OMe

IC C09B  
CC 40 (Dyes, Fluorescent Whitening Agents, and Photosensitizers)  
IT **26427-99-6P** 26428-00-2P **26428-01-3P**  
**26777-95-7P** 27014-99-9P  
(preparation of)